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APPLICATION NO. FILING DATE		FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO	
10/519,939	01/25/2005	Paulus Pieter De Wit	122235 5044		
RALPH J. MAN	7590 06/18/2007 NCINI	EXAM	EXAMINER		
AKZO NOBEL INC.			WHITE, EVERETT NMN		
7 LIVINGSTON NEW YORK, N		ART UNIT	PAPER NUMBER		
7,5,7,7,0,10,1,7,7			1623		
			MAIL DATE	DELIVERY MODE	
			06/18/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

		Application	No.	Applicant(s)				
Office Action Commons		10/519,939		DE WIT, PAULUS, PIETER				
	Office Action Summary	Examiner		Art Unit				
		Everett Whit		1623				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply								
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).								
Status								
1)	Responsive to communication(s) filed on		•					
2a)□	57							
3)								
,	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.							
Disposition of Claims								
4)⊠	4)⊠ Claim(s) <u>1-12</u> is/are pending in the application.							
•	4a) Of the above claim(s) is/are withdrawn from consideration.							
5) Claim(s) is/are allowed.								
·	6)⊠ Claim(s) <u>1-12</u> is/are rejected.							
7)	Claim(s) is/are objected to.							
8)□	Claim(s) are subject to restriction and/	or election req	uirement.					
Applicati	on Papers							
9) The specification is objected to by the Examiner.								
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.								
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).								
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).								
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.								
Priority u	ınder 35 U.S.C. § 119							
12)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a)⊠ All b)□ Some * c)□ None of:								
۵,	1. Certified copies of the priority documents have been received.							
	2. Certified copies of the priority documents have been received in Application No							
	3.⊠ Copies of the certified copies of the priority documents have been received in this National Stage							
application from the International Bureau (PCT Rule 17.2(a)).								
* See the attached detailed Office action for a list of the certified copies not received.								
Attachment(s)								
1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)								
2) Notic	e of Draftsperson's Patent Drawing Review (PTO-948)		Paper No(s)/Mail Da	te				
	nation Disclosure Statement(s) (PTO/SB/08) r No(s)/Mail Date <u>4/28/2005</u> .		)	Informal Patent Application				

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## **DETAILED ACTION**

## Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 2. Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hilbig et al (US Patent No. 5,708,162).

Applicant claims a process for preparing a solution of a polysaccharide or polysaccharide ether having a viscosity of 1,000 mPa.s or less comprising adding to an aqueous medium a polysaccharide or polysaccharide ether and an alkaline depolymerization agent, characterized in that the polysaccharide or polysaccharide ether and the alkaline depolymerization agent are added simultaneously to the aqueous medium.

The Hilbig et al patent discloses processes for the preparation of low molecular weight polysaccharide ethers wherein Example 2 of the Hilbig et al patent discloses preparation of a carboxymethylcelllulose that involve an initial step that prepares a cellulose ether solution, wherein alkali treatment of the solution is carried out using sodium hydroxide (see step 2.1). Oxidative degradation of the cellulose ether is performed in the 2<sup>nd</sup> step (step 2.2), which involves the sodium perborate tetrehydrate being shaken into the reaction slurry in solid form. The carboxymethylcellulose and sodium perborate of the Hilbig et al patent anticipate the same as disclosed in instant Claims 3, 5 and 6 and the sodium hydroxide used in Example 2 of the Hilbig et al patent anticipate the sodium hydroxide disclosed in instant Claim 4. Example 2 of the Hilbig et al discloses the depolymerized carboxymethylcellulose as having a viscosity of 19 mPa.s (see column 9, lines 34 and 35), which anticipate the viscosity of 1000 mPa.s or less disclosed in instant Claim 1.

It is noted that the instant specification on page 7, lines 19-27, discloses that the polysaccharide or polysaccharide ether and the alkaline depolymerization agent are

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added simultaneously to the aqueous medium in order to prevent decomposition of the depolymerization agent before it is able to depolymerize the polymer, which reduces the efficiency of the depolymerization reaction. Example 2 of the Hilbig et al patent discloses adding the sodium perborate into the reaction slurry containing the carboxymethylcellulose in solid form, which would avoid the depolymerization agent being decomposed before it is able to depolymerize the polymer. Hence, this procedure disclosed in Example 2 of the Hilbig et al patent anticipate the simultaneously addition of the polysaccharide ether and the alkaline depolymerization agent to the aqueous medium as disclosed in instant Claim 1 since the procedure solves the problem of premature decomposition of the depolymerization agent.

3. Claims 7-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Matsunaga et al (US Patent No. 4,071,462).

Applicant claims a solid composition comprising a polysaccharide ether and an alkaline depolymerization agent characterized in that the alkaline depolymerization agent is selected from the group consisting of sodium percarbonate, carbamide peroxide in combination with a base, sodium persulfate in combination with a base, 3-chloroperoxybenzoic acid (m-CPBA) in combination with a base, and mixtures thereof.

The Matsunaga et al patent discloses a dry granulated product in Example 1 (see column 4, lines 55-62) comprising sodium percarbonate powder and carboxymethyl cellulose, which anticipate instant Claims 7-12 when the composition thereof comprises sodium percarbonate and carboxymethyl cellulose.

## Summary

4. All the pending claims are rejected.

## Examiner's Telephone Number, Fax Number, and Other Information

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Everett White whose telephone number is 571-272-0660. The examiner can normally be reached on 9:30 to 6:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shaojia A. Jiang can be reached on 571-272-0627. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

F White

Shaojia A. Jiang

Supervisory Primary Examiner

Technology Center 1600